

### **What are head lice?**

The head louse (*Pediculous humanus capitus*) is one of three types of lice that infest people. Head lice are tiny insects (about 1/10 to 1/8 of an inch long) that live in human hair and feed on human blood. They multiply rapidly, laying little silvery-colored oval-shaped eggs (called nits) which they glue to the base of the hair, close to the scalp.

### **Can you see head lice?**

Although it's hard to see head lice, you can see the nits if you look closely. They are most often found in the hair behind the ears and at the back of the head and neck. Nits should not be confused with dandruff. Dandruff can easily be flicked off the hair; nits cannot because they are firmly attached to individual hairs.

### **Who gets head lice and what are the symptoms?**

Anyone can get head lice. They are not a sign of being dirty. Head lice are easily spread from person to person by direct contact, and are often found in school settings. One telltale sign of head lice is a persistent itching of the scalp which is sometimes accompanied by infected scratch marks or what appears to be a rash.

### **How are head lice spread and how long is a person able to spread them?**

Head lice have no wings and do not fly or jump; they crawl. They are spread through direct contact with an infested person, or with shared items such as combs, brushes, towels, pillowcases, hats, headphones, other headgear, and clothing. Shared lockers and wall hooks may permit the spread of head lice. They may be spread as long as lice or eggs remain alive on the infested person or in clothing. Head lice do not spread any disease.

### **How long do lice live?**

Head lice need human blood to survive. They usually do not survive for more than 2 days away from the human body. The nits (louse eggs) cannot hatch at the lower temperatures found away from the scalp.

### **What is the treatment? Is there treatment failure or drug resistance?**

Treatment should be given only to people who have active lice or viable eggs present. The recommended treatment is a medicated shampoo that contains either pyrethrin, such as RID, A-200, or Clear brands, or permethrin, as in the Nix brand. These products are available without a prescription, should be used as instructed on the package, and may kill the lice but not their eggs. After shampooing, the remaining eggs should be removed with a special nit comb or fine-tooth metal comb. A second treatment 7-10 days after the first is recommended to assure that no nits have survived. The hair should be carefully checked and nits removed every day for 2 weeks to be sure the infestation has been cured. Checking hair, a small section at a time, under a fluorescent light and using a magnifying glass makes the nits easier to find. Kerosene, oil, or pet shampoo should NOT be used to treat a lice infestation. Lindane may be prescribed in

certain instances when other treatments have failed, but should be used only with extreme caution, carefully following the label.

More people are starting to report cases that might be resistant to treatment. Studies are underway to determine if some of the current remedies are no longer effective. In cases that do not seem to respond to treatment, manual removal of nits is the most important procedure to follow.

### **How do I keep the lice from coming back or spreading to others in my home?**

To prevent reinfestation, the hair of everyone in the household should be checked when anyone is found to have head lice. Everyone with head lice in the same household should be treated on the same day. Towels used to dry the hair after treatment with the lice shampoo should be washed immediately.

Clothing, bedding, and soft toys should be specially cleaned, such as by using hot water, hot dryers (for at least 20 minutes), or by dry cleaning. Items that cannot be washed should be sealed in a plastic bag for 2 weeks. Floors, furniture, car seats and upholstery, and carpeting should be vacuumed. Insecticide sprays are not recommended.

Combs and brushes should be disinfected, then washed in hot water daily. Disinfecting is done by soaking them in lice shampoo for 4 minutes, soaking them in a 2% Lysol solution for 1 hour, or boiling them in water for 10 minutes.

Hair inspection and manual removal of the nits is very important in preventing reinfestation. Nits found close to the scalp after treatment should be removed. Nits that have hatched or died, as well as empty egg casings, play no role in the spread of head lice. Nits that are seen more than 1/4 of an inch from the scalp are probably from an old infestation.

### **What else can be done to prevent head lice?**

Children need to be told not to share headgear, coats, combs, and other articles at school. Parents should routinely check their children's hair. Child care providers need to have policies in place regarding head lice management and make sure that the parents are aware of them. Call your doctor, school nurse, or local health department for more information.